International Centre for Allied Health Evidence

iCAHE Outcomes Calculator Musculoskeletal Version

Software Guide

Monitoring patient status over time using common pain and musculoskeletal outcome measures

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Note: This manual is to be used in conjunction with the *i*CAHE Outcomes Calculator User Manual.

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1. Installing the Software

On the CD there will be the following four directories:

Chronic Disease

Incontinence

Musculoskeletal

Neurological

Patch

To install the Musculoskeletal Outcomes Calculator, open the Musculoskeletal directory by double clicking on it. Run the following file by double clicking on it:

setup.exe

Follow the simple instructions. The program will install the software on your computer. Once the software is completely installed, an icon should appear on your desktop called "Outcomes Calculator". Double click this icon to run the software.

2. Installation Patch

If the program opens and the following message appears (Figure 1), the patch must be installed. Open the directory called "Patch" on your CD and run the file called "idapi32.exe". It will open a small program. Don't change any of the settings. Just press the "Unzip" button. Then close this program. Now you can open any of the calculators again by double clicking on the icon on your desktop.

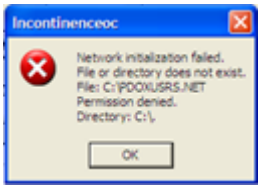

Figure 1 Installation PDOXUSRS.NET Error

3. Running the Outcomes Calculator

The Outcomes Calculator installation will install a shortcut in the Start Menu to allow you to start the software. For instance, if the default shortcut settings were accepted then the software may be run by navigating to:

Start Menu > Programs > Outcomes Calculator

Select this shortcut, and the calculator will start.

There will also be an icon (Figure 2) on the computer's desktop. Double clicking this icon will also open the software.

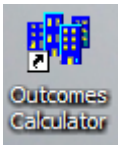

Figure 2 Musculoskeletal Outcomes Calculator Icon

4. Using the Quick Start Menu

When the software opens, the Quick Start window (Figure 3) is shown. This provides a way of quickly opening or creating an Episode of Care (EoC). Simply select what you want to do and press **OK** and the appropriate screen will open. If you don't want to open or create an EoC, press the **Cancel** button. This window will not be displayed again while the software is running.

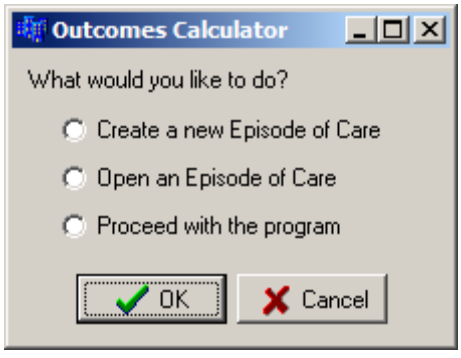

Figure 3 Quick Start Menu

5. Performing Tasks

5.1 Create a New Episode of Care

5.1.1 Overview

An episode of care is made up by the occasions of service provided to a patient from their first presentation until they no longer require treatment. The process of creating a new episode of care requires several stages. Firstly, information is gathered about the patient whom the episode of care concerns. Secondly, information is gathered about the episode itself. Finally, outcome measures are chosen to keep track of the episode's progress over time.

5.1.2 General Controls

On each screen in the process of creating a new episode of care a set of common controls is present:

Figure 4 EoC Navigation Buttons

The controls consist of four buttons labelled **Prev** (Previous), **Next** and **Cancel**. These controls are located at the bottom of each screen. In the example above, the **Prev** button is not available because there is no previous screen to return to.

Select **Next** after completing a screen in order to move onto the next screen in the process. A dialog box will pop up if required details have not been filled in. Select **Prev** to return to the previous stage in the process to make changes and alterations to previously entered data. Select **Cancel** at any point to cease the process of creating a new episode of care, and return to the main Outcome Calculator screen.

Once all the general EoC data is captured, the EoC will be created and assessments can be made.

5.1.3 Step 1 – Initiating an Episode of Care

Initiate a new EoC by following these commands on the menu bar.

Episode > New

This is shown in Figure 5.

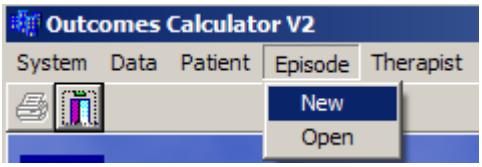

Figure 5 Initiate a New Episode of Care

5.1.4 Step 2 – Enter Patient & Funding Details

Specify a Patient

The episode of care may be created for a new patient or for a patient already known to the Outcomes Calculator. To enter a new patient's details press the **New** button in the Create a New Episode of Care screen (see Figure 6) and specify the name, date of birth and gender using the provided fields. Alternatively press the **Select** button to choose a patient whose details are already recorded in the Outcomes Calculator.

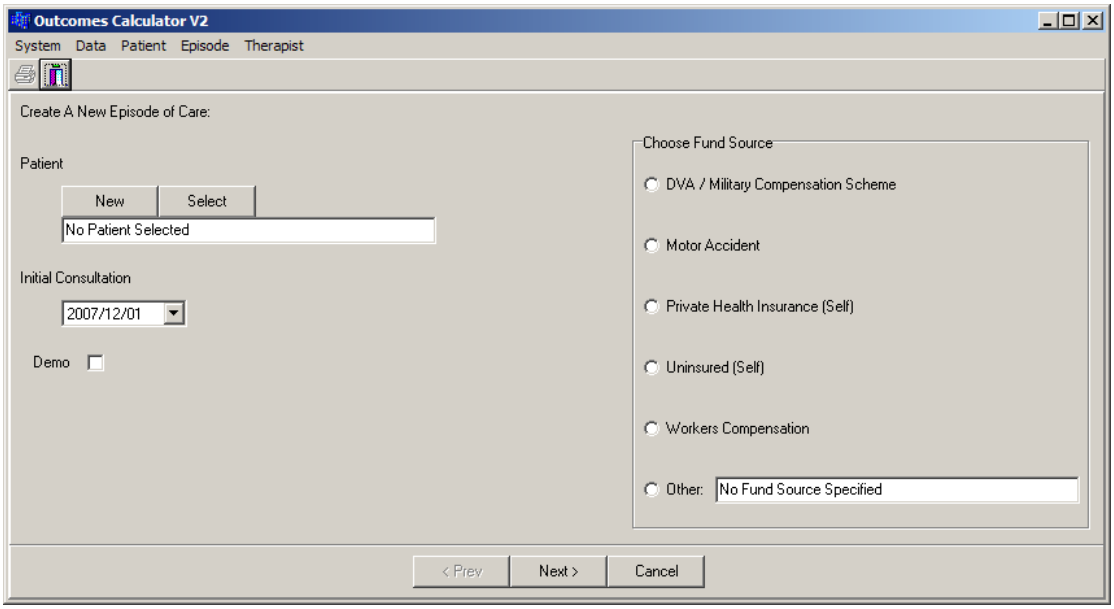

Figure 6 Patient & Funding Details Screen

Selecting a Patient

If the **Select** button was pressed, the Patient Information screen will appear (Figure 7). There are two ways of finding a patient.

The first method is to browse the database using the Navigation Buttons. The leftmost button opens the first record in the database. In Figure 7, the button is inactive (grey), because the first record is displayed. The second button from the left moves one record at a time back. Again, in Figure 7 this button is inactive because the first record is displayed. The third button from the left moves one record at a time forward. The button on the right moves to the last record in the database.

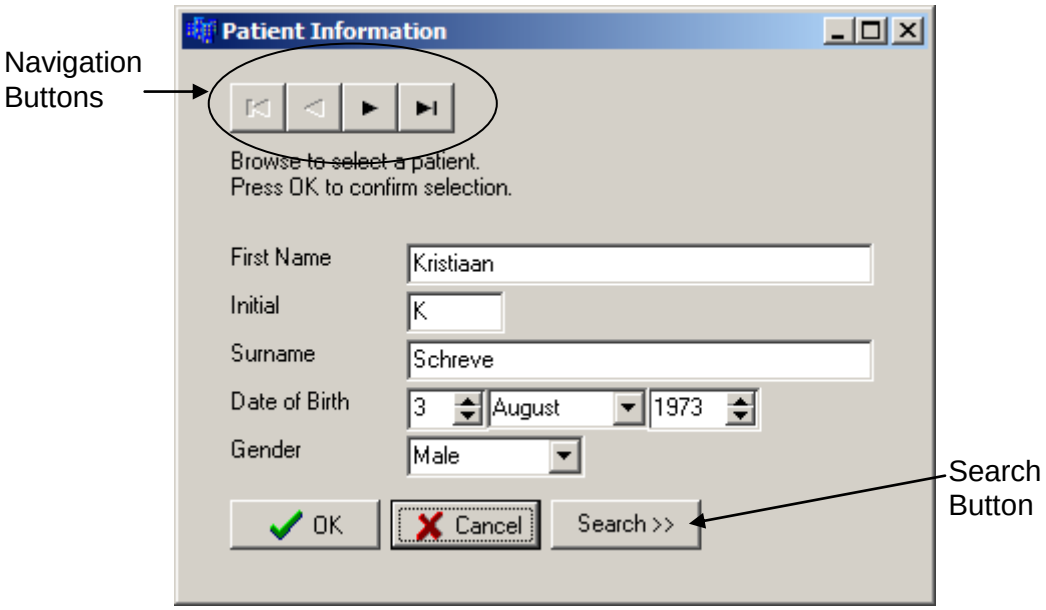

Figure 7 Patient Information Screen

This method can be time consuming. A faster way of finding a patient is to press the **Search** button. The Patient Information screen will change appearance and look as shown in Figure 8. Notice that the name of the **Search** button has changed to **Close**. Pressing the **Close** button will change the screen back to its original appearance.

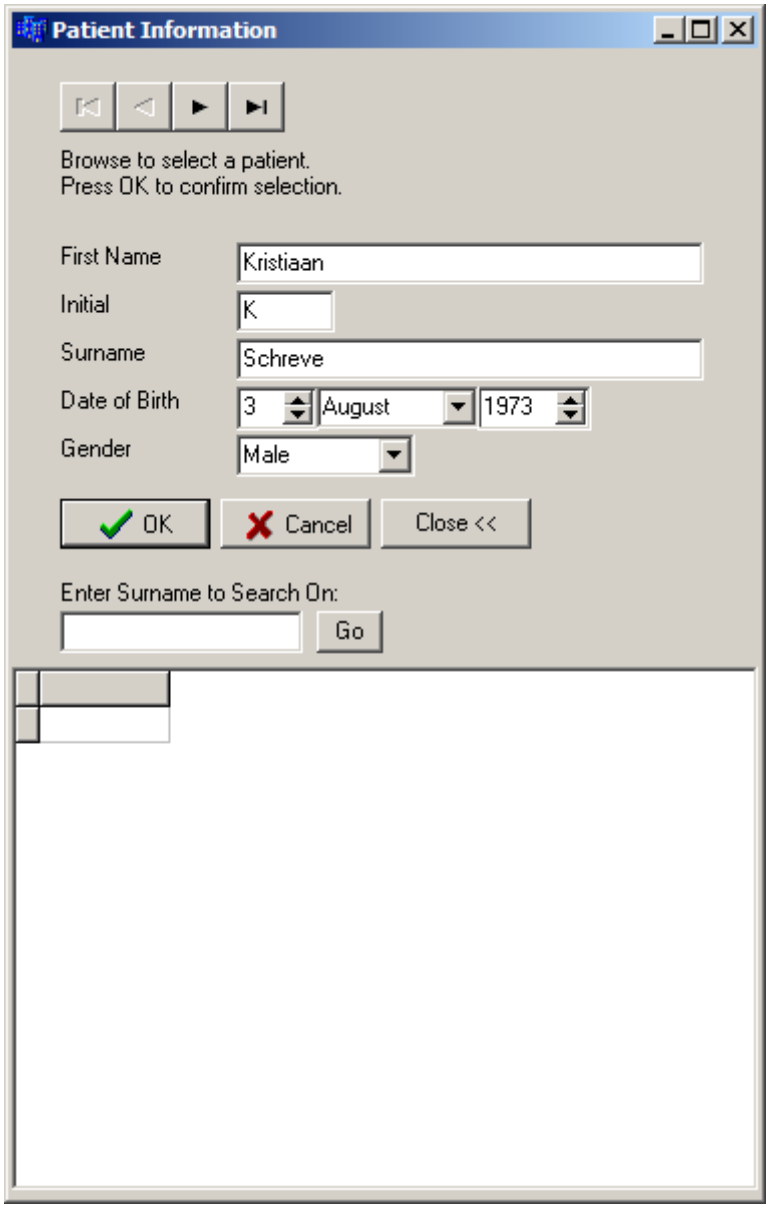

Figure 8 Patient Information Screen with Search Function

Type the surname of the patient you are looking for in the box labelled **Enter Surname to Search On:**. Now press the **Go** button. All the patients with this surname will be shown in the list at the bottom of the screen. Click on the patient you are looking for. The selected patient's details will be displayed in the top part of the screen.

Once you have selected a patient, press the OK button. This will return you to the Patient & Funding Details screen (Figure 6).

Specify an Initial Consultation Date

The date specified marks the beginning of the episode. Press the down arrow of the box labelled **Initial Consultation**. A calendar will appear (Figure 9). The calendar will open at the current date. If you want to specify another date in the same month, simply click on the date. Select another month by clicking on the left and right arrows at the top of the calendar. The selected date will appear in the edit box.

Figure 9 Calendar

Select a Funding Source

The source of funds that the patient will use to cover the episode of care is specified using the provided form. Only one fund source may be specified in the **Choose Fund Source** box. If standard options do not suitably describe the fund source then select the **Other** option and enter a brief description in the text field provided below it.

Creating a Demo Episode of Care

This option will not be available in all versions of the calculator. A demo EoC is used in class demonstrations, etc. Simply check the **Demo** box.

Continue

If all patient and funding details have been entered then click **Next** to continue to the next step.

5.1.5 Step 3 - Enter Episode Details

A new screen (Figure 10) will open after the last step is completed.

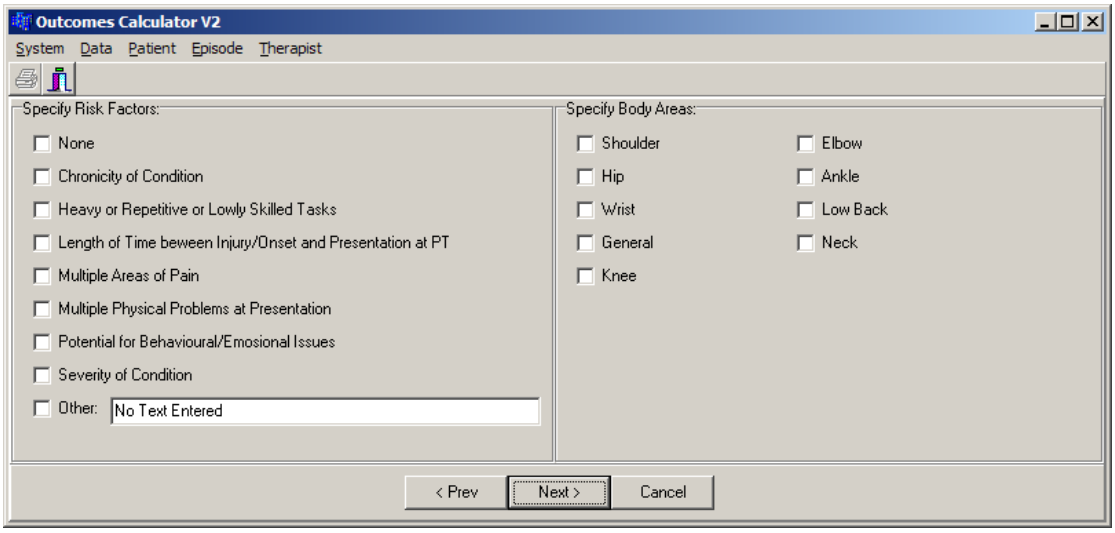

Figure 10 Risk Factors and Body Areas Screen

Specify Risk Factors

The risk factors that may affect the episode of care are specified by ticking each one that applies in the **Specify Risk Factors** box. Any number of risks may be selected. If the standard risks do not suitably describe a risk then select the **Other** option and enter a brief description in the text field provided below it.

Specify Affected Body Areas

The body areas affected in the episode of care are specified by ticking each one that applies in the **Specify Body Areas** box. Any number of areas may be selected. Only those areas that may be measured by outcome measures in the Musculoskeletal Outcomes Calculator are available.

Continue

If all applicable risk factors and affected body areas have been selected then click **Next** to continue to the next step.

5.1.6 Step 4 – Configure Outcome Measures

After completing the previous step, a new screen (Figure 11) will open.

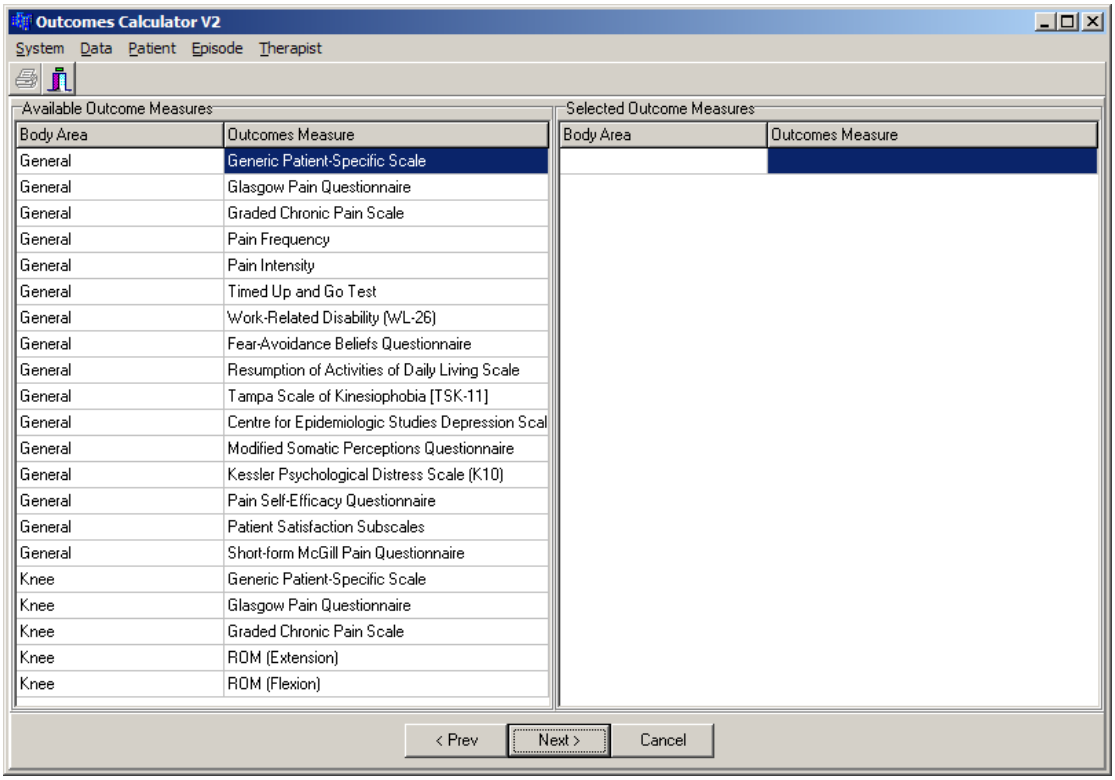
Outcomes Calculator V2
System Data Patient Episode Therapist
Available Outcome Measures
Selected Outcome Measures
Body Area
Outcomes Measure
General Generic Patient-Specific Scale
General Glasgow Pain Questionnaire
General Graded Chronic Pain Scale
General Pain Frequency
General Pain Intensity
General Timed Up and Go Test
General Work-Related Disability (WL-26)
General Fear-Avoidance Beliefs Questionnaire
General Resumption of Activities of Daily Living Scale
General Tampa Scale of Kinesiophobia [TSK-11]
General Centre for Epidemiologic Studies Depression Scal
General Modified Somatic Perceptions Questionnaire
General Kessler Psychological Distress Scale (K10)
General Pain Self-Efficacy Questionnaire
General Patient Satisfaction Subscales
General Short-form McGill Pain Questionnaire
Knee Generic Patient-Specific Scale
Knee Glasgow Pain Questionnaire
Knee Graded Chronic Pain Scale
Knee ROM (Extension)
Knee ROM (Flexion)
< Prev
Next >
Cancel

Figure 11 Selecting Outcome Measures Screen

Select Appropriate Outcome Measures

The musculoskeletal outcome measures available for each body selected in the prior step are presented for selection. A minimum of one measure must be selected for each body area. To select a measure and use it in the created episode, click on it in the right hand column of the **Available Outcome Measures** list. To remove a measure once you have selected it, click on it in the right hand column of the **Selected Outcome Measures** list.

Some pairings must be configured before they can be used. If this is the case then a dialog box will be presented with a configuration form – complete this and click **OK** to select the measure, or click **Cancel** otherwise.

Continue

If all desired measures have been selected then click **Next** to create the episode. The episode details will be saved and the episode will automatically be opened for management. Note that once **Next** is pressed, the data will immediately be saved to the database and cannot be changed again. If the data was entered incorrectly, a new EoC must be created with the correct data. This is to ensure the integrity of the data.

5.2 Add a New Patient

Adding a new patient to the Outcome Calculator is done during the creation of their first episode of care (See Section 5.1 Create a New Episode of Care). Their details are recorded as part of the creation process. When the episode of care is created, these details are used to create a new patient record. Subsequent episodes of care may then be added for the patient without re-entering patient details.

New patient data can also be added at any time by using the following these commands on the top menu bar.

Patient > New

Independent of the method that you decide to add a new patient, the Patient Information Screen (Figure 7) will be displayed. Note that all the navigation buttons will be inactive and the boxes (except the **Date of Birth**) will be empty. Enter the correct patient data in all the fields. Note that in the **Gender** field, only a selection must be made by pressing on the down arrow on the right of the box. Do not type anything in the **Gender** box.

Make sure that all the data is correct. Once it is saved in the database, it cannot be changed again. This is to ensure the integrity of the data. Now press **OK** to save the data. Pressing **Cancel** will close the window without saving the data.

5.3 Looking Up Patient Data

The details of any patient can be checked at any time by following these commands on the top menu bar:

Patient > Browse

The Patient Information Screen (Figure 7) will be displayed. Patients can be found as explained in Section 5.1.4 Step 2 – Enter Patient & Funding Details.

5.4 Manage an Episode of Care

5.4.1 Overview

Managing an episode of care allows viewing summary information that describes the episode, adding new assessments to the episode, and viewing a chart of the progress of a patient's progress over time.

5.4.2 Open an Episode of Care for Management

To open a created episode of care, follow these commands on the menu bar:

Episode > Open

The **Select Episode of Care** screen will be shown (Figure 12). The patient data of all the patients in the database are accessible. Browse to the correct patient using the Navigation Buttons on the top of the screen. As you browse, note that all the episodes of care for the selected patient is displayed in the list on the bottom of the screen. Each EoC is represented with a date range in the list box (**Initial Consultation** and **Completed**). If the EoC is still open, there will be no date in the **Completed** column.

To open an episode of care for a patient first select a patient from the patient list and then select an episode from the available episodes of care for that patient. Click **OK** to open the episode for management, or **Cancel** at any point to close the dialog without opening an episode.

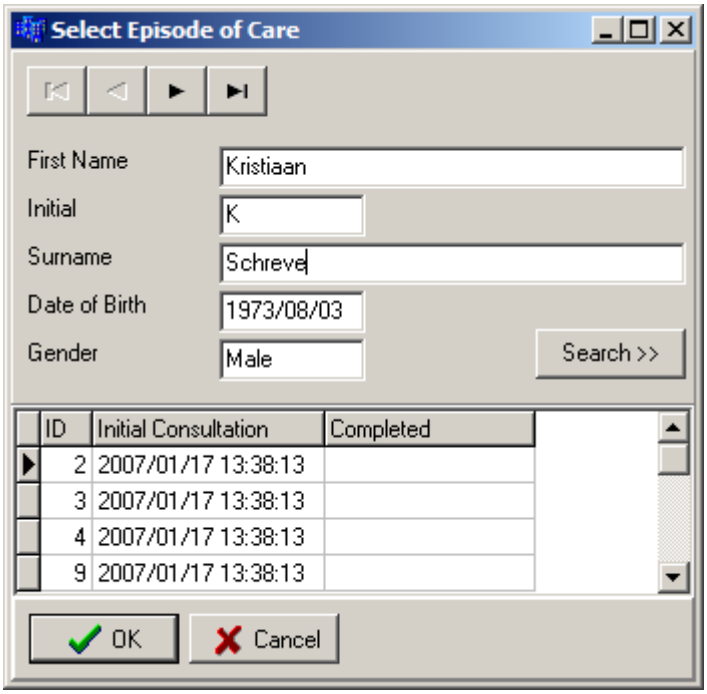

Figure 12 Select Episode of Care Screen

A faster way of finding a patient is using the **Search** button. Pressing it will extend the screen with additional controls to find a patient (Figure 13). Note that the name of the button changed to **Close**. Pressing the button again will close the extra search functions. Type the patient's surname in the **Enter Surname to Search On:** box. Then press the **Go** button. This will display all the patients in the database with that surname in the list below the **Go** button. You can now select a patient from this list and his/her details will be shown in the fields on the left of the screen.

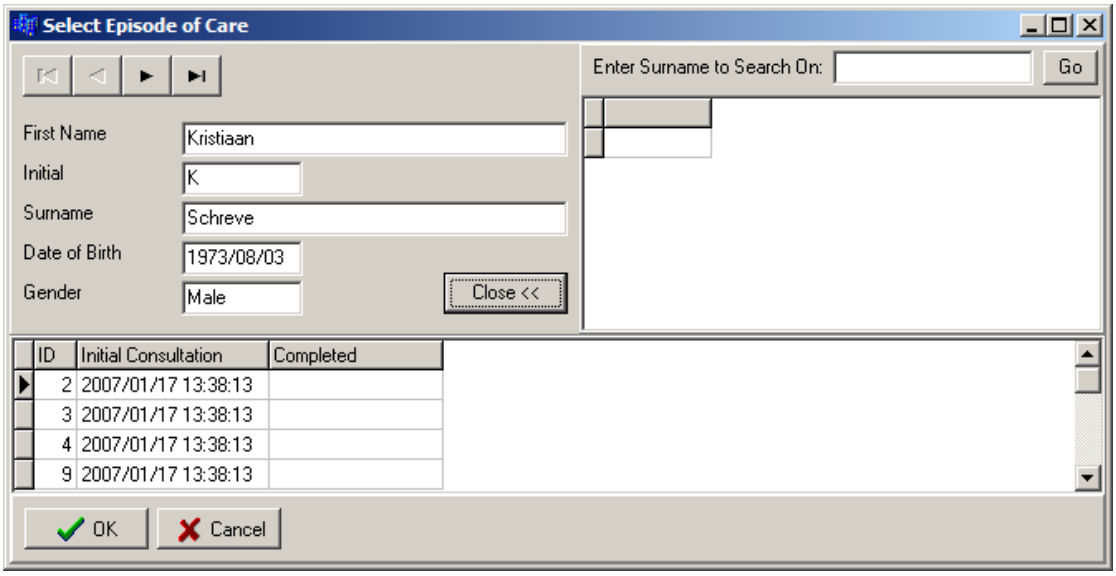

Figure 13 Search for a Patient on the Select Episode of Care Screen

5.4.3 The Episode Management Screen

The Episode Management screen (Figure 14) will be the first screen to open when an episode is loaded.

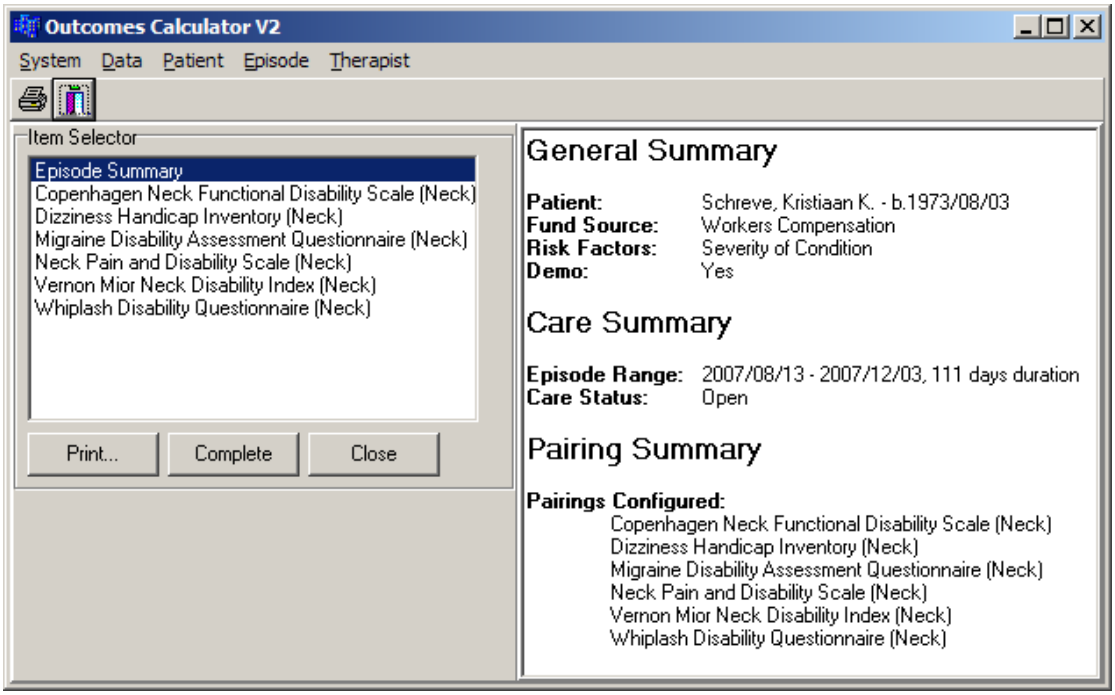

Figure 14 Episode Management Screen

Work Area (Right Hand Pane)

The work area displays information of the currently selected item in the **Item Selector** (left hand pane). In Figure 14 the Episode Summary is currently selected. In the work area general information on the episode is displayed.

Control Area (Left Hand Pane)

The **Item Selector** contains an item called *Episode Summary*, always the first item. Below that all the outcome measures selected for this episode is displayed. When the *Episode Summary* is selected, the Episode Management Screen will look as displayed in Figure 14.

The **Print** button will print whatever is displayed in the work area, in this case the *Episode Summary*.

Pressing the **Complete** button will change the episode status of 'open' to complete. This indicates that no further assessments will be conducted for it. Assessments cannot be added to a completed episode.

To complete an episode of care first open an episode of care and then click the **Complete** button in the control area. A confirm dialog will be presented to double check that the episode should indeed be closed – click **Yes** to perform the action, or **No** to return to the management screen without completing the episode.

When a user clicks **Complete** the episode will remain managed. It may be closed and managed again at a later time, but it will no longer be possible to add assessments to it. An episode should be completed only when there will be no more assessments relating to that episode of care in the future.

Note that once an episode's status is changed to closed (using the **Complete**) button, it cannot be changed back again.

Pressing the **Close** button will close the episode for management without changing the status of the episode. Therefore, when the episode is again opened for management, it will be possible to add new assessment data.

5.4.4 View an Outcome Measure Progress Chart / Add an Outcome Measure Assessment to an Episode of Care

Assessments of an outcome measure may be added to an episode of care to record a patient's progress throughout the episode. To add an assessment, first open an episode of care for management. When the episode is being managed use the **Item Selector** drop down to select the outcome measure / body area pairing that will be assessed.

Note that the management screen's appearance has now changed. An **Assessment** and **Data Series** panel are added to the *Control Area*. The *Progress Chart* for the selected outcome measure is displayed in the *Work Area*.

Progress Chart

The work area will be updated to show the current progress chart (Figure 15) for the selected outcome measure / body area pairing. If assessments are recorded then the date range of the assessments will be shown and each data series that is available for assessments of that pairing will be plotted on the chart. Each data point represents a data score for that series of the assessed outcome measure at the date/time that it was assessed.

Notice that where applicable, the vertical axis displays the range of minimum to maximum scores. This is done for all scales that have such a range. Otherwise the axis range is the range between the maximum and minimum recorded scores.

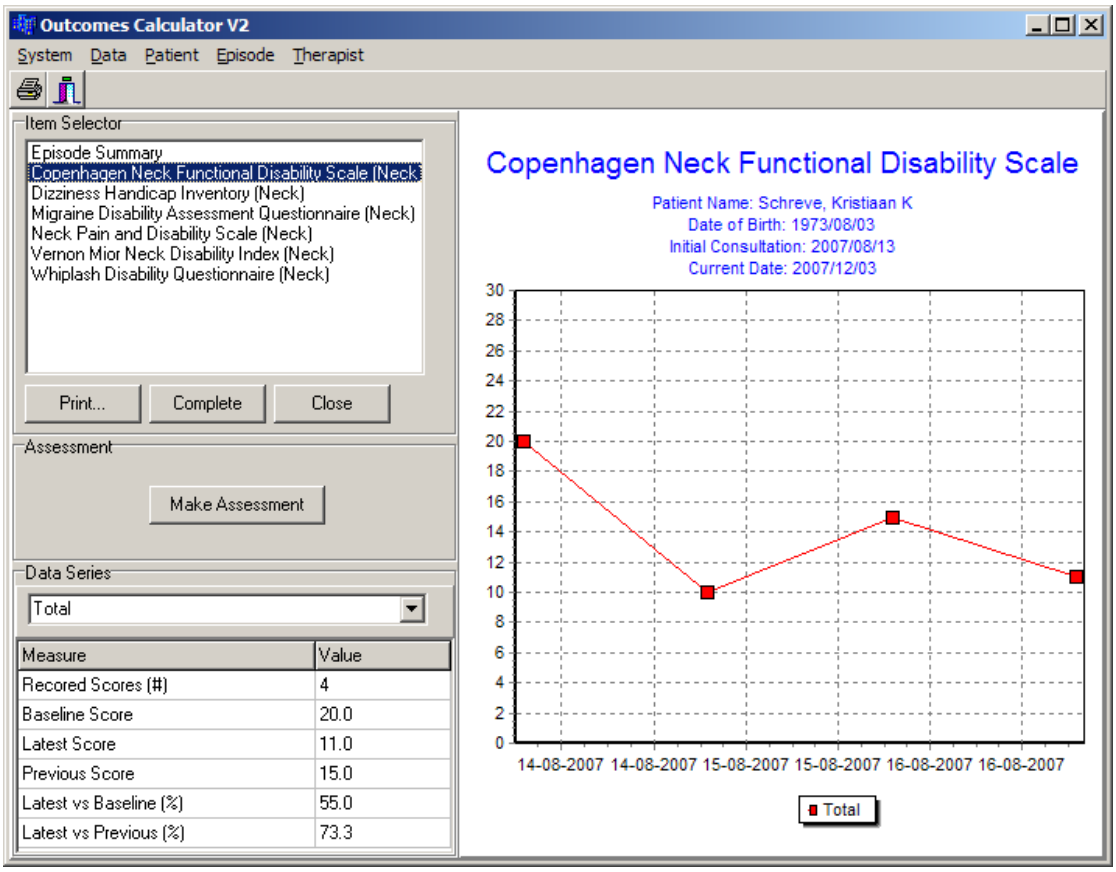

Figure 15 Episode Management Screen with Progress Chart

Adding an Assessment

To add an assessment for the selected outcome measure:

1. Click the **Make Assessment** button.
2. The Therapists screen (Figure 16) will be displayed to select the therapist who did the assessment, if the *Always Use Default* therapist option is off (see section 5.4.5 Selecting a Default Therapist). Use the navigation buttons at the top of the screen to make the selection.

3. If the *Demo* option is available in your version of the calculator, and the episode was created as a *Demo*, the next screen will ask you to set the assessment date and time (Figure 17). Specify the date and time. The current date and time will be selected by default. When you press **OK**, the selected date and time will be used as the assessment date and time.
4. Next, the questionnaire will be displayed. This screen will depend on the selected outcome measure (see section 7 Outcome Measure Screens).

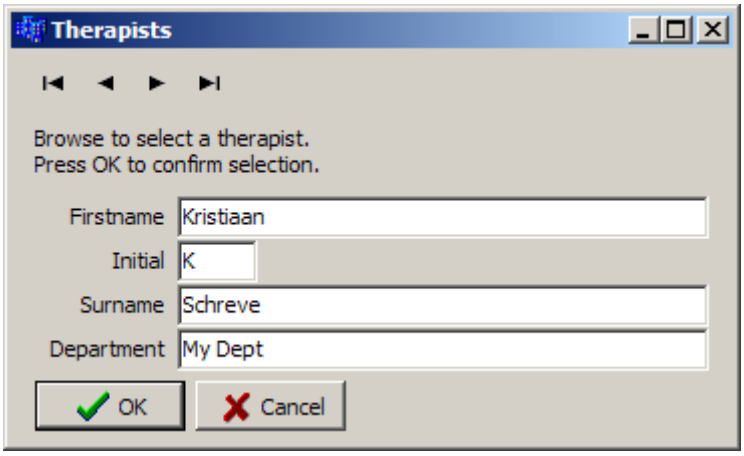

Figure 16 Therapist Selection Screen

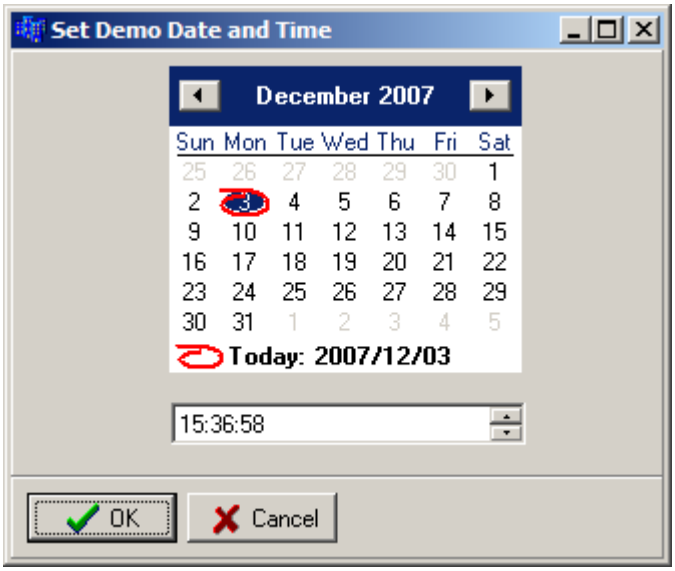

Figure 17 Set Assessment Date and Time Screen – Available only on version that allow demo episodes of care

Note that, unless the episode is a *Demo* (only available in some versions of the software), the current date and time are automatically used as the assessment date and time.

Data Series Analyses Metrics

The control area will automatically display a set of basic data series analyses metrics for any progress chart that contains at least one data series with at least one data point. This is shown in the **Data Series** area. If there is more than one data series on the displayed chart then the drop down box may be used to select which data series is analysed.

Each metric describes a characteristic of the data series that is being analysed. The following metrics will be displayed for a data series (when applicable):

Recorded Scores (#)	The raw number of data points in the series.
Baseline Score	The raw baseline (initial) score.
Latest Score	The raw latest score.
Previous Score	The raw second-latest score. Only available when 2 or more assessments have been made.
Latest Vs Baseline	The raw latest score compared to the raw baseline score, expressed as a percentage. If the baseline score was zero, the value will be *Inf*.
Latest Vs Previous	The raw second-latest score compared to the raw baseline score, expressed as a percentage. Only available when 2 or more assessments have been made. If the baseline score was zero, the value will be *Inf*.

5.4.5 Selecting a Default Therapist

It can be annoying to enter the therapist name every time if the software is only used by one therapist. The Default Therapist option allows the user to set the name of the default therapist. Use the following commands from the menu bar:

Therapist > Set Default

The Therapist Selection screen (Figure 16) will be displayed. Navigate to the desired therapist and press **OK** to make the selection the Default Therapist.

Next, make sure that the **Always Use Default** option is checked (there is a small check mark next to the option). Use the following commands from the menu bar:

Therapist > Always Use Default

If there is no check mark next to it, click on the option. Repeat the above menu commands without clicking on **Always Use Default**. Notice that there is now a check mark next to the command.

If the **Always Use Default** option is selected, step 2 for creating a new assessment will be skipped, because the Therapists screen will not open. The Default Therapist will automatically be selected from the database.

These options can be changed at any time.

6. Import/Export Data

All the data entered in the software is saved automatically. Sometimes it may be necessary to extract data from the database. This can be done using the import and export functions.

6.1 Export Data for Sharing

Data can be extracted from the database and saved in a file format that can again be imported by another user. This function will be used if you want to share some data with another user. The data will be saved in a special file that can be shared with anybody using the same version of the Outcomes Calculator.

Use the following menu commands:

Data > Export > Data

The Develop Query screen (Figure 18) will be displayed.

6.1.1 Query the Data

This screen (Figure 18) consists of five sections that can be used to refine the data. Any combination of the five sections, or none, or all five, can be used in the query.

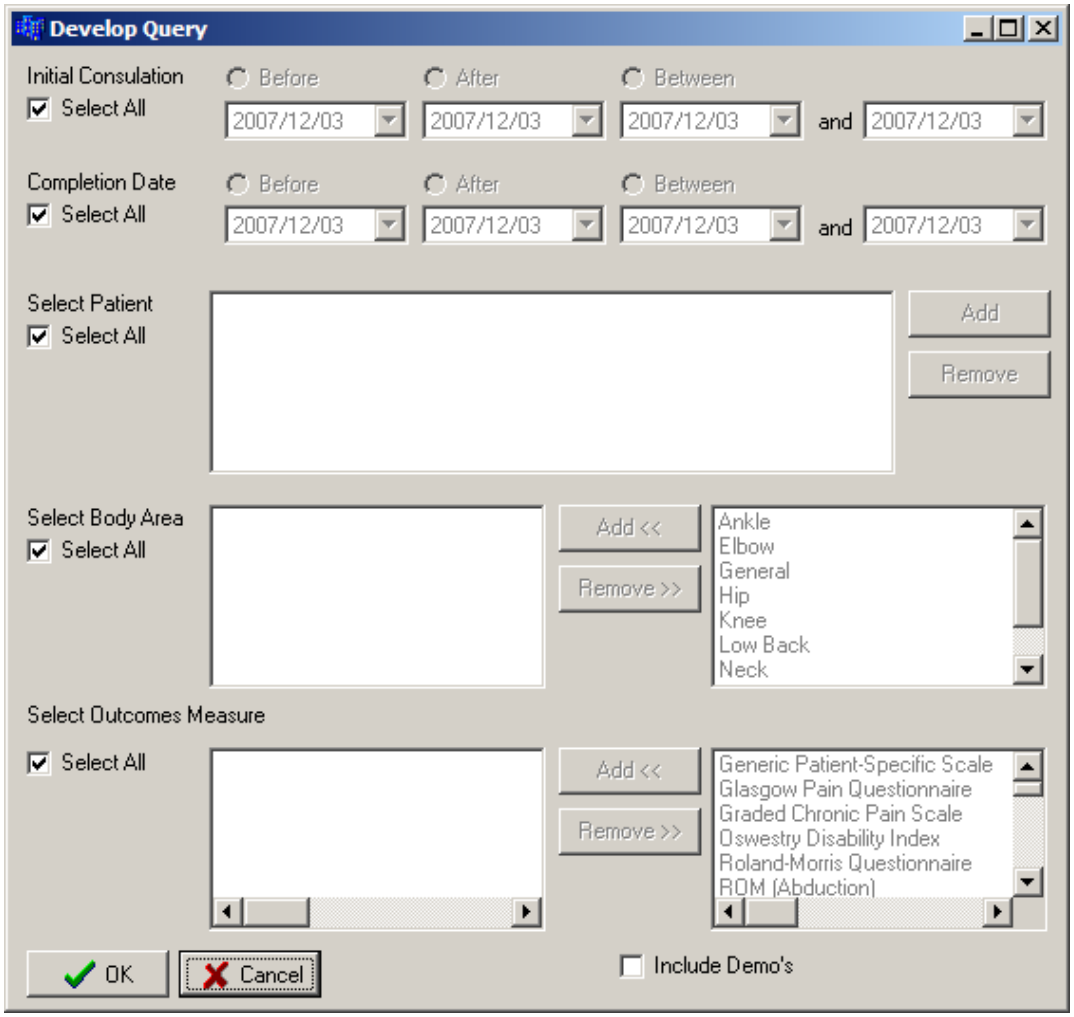

Figure 18 Develop Query Screen

Initial Consultation

The initial consultation date can be specified. The **Select All** option must first be unchecked to activate the search options. Just click on **Select All** and notice that the options to the right become active. There are three options:

Before Episodes of care which started before or on the date specified in the **Before** box will be selected. Select the date using the drop down calendar (see Figure 9).

After Episodes of care which started after or on the date specified in the **After** box will be selected. Select the date using the drop down calendar (see Figure 9).

Between Episodes of care which started after or on the date specified in the first box (below **Between**) and before or on the date specified in the last box will be selected. Select the date using the drop down calendar (see Figure 9).

Note that only one of the date options can be used. Notice that if the **Select All** option is checked, all the dates will be used in the query.

Completion Date

The date on which the episode was completed (i.e. status changed to "closed") can be selected. The **Select All** option must first be unchecked to activate the search options. Just click on **Select All** and notice that the options to the right become active. There are three options:

Before Episodes of care which were completed before or on the date specified in the **Before** box will be selected. Select the date using the drop down calendar (see Figure 9).

After Episodes of care which were completed after or on the date specified in the **After** box will be selected. Select the date using the drop down calendar (see Figure 9).

Between Episodes of care which were completed after or on the date specified in the first box (below **Between**) and before or on the date specified in the last box will be selected. Select the date using the drop down calendar (see Figure 9).

Note that only one of the date options can be used. Notice that if the **Select All** option is checked, all the dates will be used in the query.

Select Patient

One or more patients can be selected from the database. The episodes in which this patient was involved in can be queried. The **Select All** option must first be unchecked to activate the

search options. Just click on **Select All** and notice that the options to the right become active.

Add a patient to the query by clicking on the **Add** button. The Patient Information screen will be displayed (see Figure 7). Any patient can be selected using the normal patient search functions (see section 5.1.4 Step 2 – Enter Patient & Funding Details). Once the **OK** button on the Patient Information screen is clicked, the patient will be added to the **Select Patient** text box.

Any number of patients can be added. To add another patient, just click the **Add** button again and follow the same procedure as described above.

A patient can be removed from the list of patients in the **Select Patient** text box. Click on the patient that must be removed so that the patient is highlighted. Then click the **Remove** button. The patient will no longer be seen in the **Select Patient** text box.

Notice that if the **Select All** option is checked, all the patients will be used in the query.

Select Body Area

The affected body area can be specified in the Musculoskeletal Outcome Calculator. This allows you to search for episodes of care conducted on the specified body area(s). The **Select All** option must first be unchecked to activate the search options. Just click on **Select All** and notice that the options to the right become active. The list box on the right contains all the available body areas. Click on the body area that must be queried in the right hand list box. Then click the **Add** button. Notice that the body area is added to the list of selected body areas on the left and that is disappears from the list of available body areas on the right.

Continue to add body areas to the list of selected body areas using the procedure described above. You can add body areas until the list of available body areas is exhausted.

A body area can be deselected by clicking on the body area in the list of selected body areas. Then click on the **Remove** button. Notice that the body area is removed from the list of selected body areas and that it reappears in the list of available body areas.

Notice that if the **Select All** option is checked, all the body areas will be used in the query.

Select Outcomes Measure

You can query episodes of care that used specified outcomes measures. The **Select All** option must first be unchecked to activate the search options. Just click on **Select All** and notice that the options to the right become active. The list box on the right contains all the available outcomes measures. Click on the outcomes measure that must be queried in the right hand list box. Then click the **Add** button. Notice that the outcomes measure is added to the list of selected outcomes measures on the left and that is disappears from the list of available outcomes measures on the right.

Continue to add outcomes measures to the list of selected outcomes measures using the procedure described above. You can add outcomes measures until the list of available outcomes measures is exhausted.

An outcomes measure can be deselected by clicking on the outcomes measure in the list of selected outcomes measures. Then click on the **Remove** button. Notice that the outcomes measure is removed from the list of selected outcomes measures and that it reappears in the list of available outcomes measures.

Notice that if the **Select All** option is checked, all the outcomes measures will be used in the query.

Include Demo's

This option is only available in some versions of the Outcomes Calculator. If the **Include Demo's** option is checked, all the episodes that was classified as demo's will be included in the query, otherwise they will be excluded.

Execute the Query

Once all the criteria are specified, click the **OK** button. This will execute the query. The results will be displayed in the **Query Results** screen (Figure 19). Pressing the **Cancel** button on the **Develop Query** screen, will close the screen without executing the query.

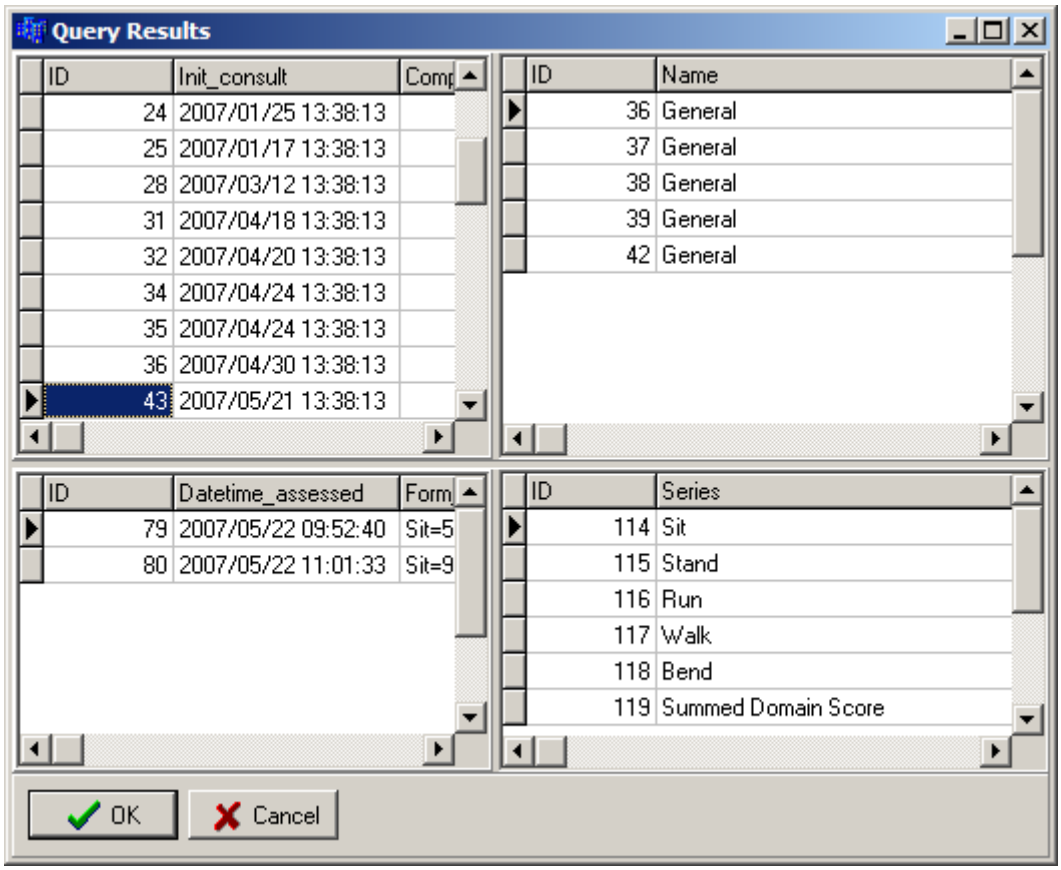

Figure 19 Query Results

The query results are displayed in four list boxes in the **Query Results** screen. The top left box shows all the episodes of care that was found, the top right list box shows the outcome measure and body area configuration, the bottom left list box shows all the assessments and the bottom right list box shows all the scores for each data series available for that assessment. Notice that if you select any item in one of the list boxes, the items in the following boxes changes (the sequence is: top left, top right, bottom left, bottom right).

The screen and boxes can also be resized to make it easier to view the data. Resize the screen by grabbing any edge or corner of the screen with the mouse cursor and dragging it until the screen is large enough. The list boxed can be resized by slowly moving the mouse curser over the area between the list boxes. Notice that the cursor will change shape at some point. At this point, hold the left mouse button down and drag it until the list box's size is good enough.

Save the Data

When the **OK** button on the **Query Results** screen is pressed, a **Save** dialog will appear. Specify the place and file name where the data must be saved. Use the default extension (.dat) without typing it explicitly. Once the **Save** button is pressed, the data will be saved. This file can now be shared by any user of the same version of the Outcomes Calculator.

6.1.2 Query Using Multiple Criteria

Any combination of the criteria described in the previous section can be used to query the data. For example, a specific patient can be selected and all the episodes of care started after a specified date can be selected. In other words, from the list of all the episodes of care for the selected patients, only those started after a specified date will be selected.

This can be done by unchecking the **Select All** options for **Initial Consultation** and **Select Patient**. Now, in any order, specify the date and select the patient using the procedures described in the previous section.

Now run the query.

6.2 Export the Data to Excel

The data can be exported to a format that can be read by Excel. It will be exported as a comma delimited file (.csv) and will therefore actual be readable by any spreadsheet program that can read comma delimited files.

Note that this format cannot be read by the Outcomes Calculator. Therefore, this will typically be used if you want to present the data in your own way or if you want to perform your own analysis on the data.

Follow these menu commands to save the data in a comma delimited format:

Data > Export > Excel

The **Develop Query** screen (Figure 18) will open. Create the query in the same way as described in section 6.1.1 Query the Data. Everything will be the same as described in that section, except when the **Save** dialog appears. Now the file format will be .csv. Give the file any name you like. Don't type the .csv extension, this will be added automatically. Once the file is saved, you should be able to open it with Excel.

7. Outcome Measure Screens

Each scale has a simple from (or forms) that must be completed to record the scores. Once all the data is captured, the scores will be calculated and the results displayed in the Episode Management screen (Figure 15). The objective of this chapter is to give some guidance to the recording of the scores in the Outcomes Calculator. It is not to give detail on the outcomes measures themselves. For that, the accompanying Outcomes Measure Manual must be consulted.

7.1 Generic Patient-Specific Scale

This scale must be configured for each patient and episode. When the scale is selected in the Selecting Outcome Measures screen (Figure 11), the Metric Configuration screen (Figure 20) will appear. Type the activities in the boxes provided. All five boxes do not have to be completed, but complete the boxes from the top down. Press **OK** to complete the configuration. If **Cancel** is pressed, the scale will not be added to the list of selected outcomes measures.

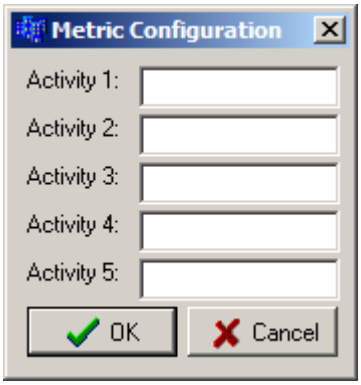

Figure 20 Generic Patient-Specific Scale Configuration Screen

The form on which the scores must be entered look like Figure 21. Enter the scores for each activity in the relevant boxes and press **OK** to record the score. **Cancel** will close the screen without recording any scores.

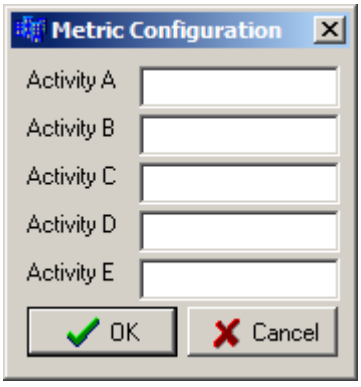

Figure 21 Generic Patient-Specific Scale Screen

7.2 Glasgow Pain Questionnaire

The screen is shown in Figure 22. Simply check all the applicable statements in the box to the left of the statement. Press **OK** to record the score. **Cancel** will close the screen without recording any scores.

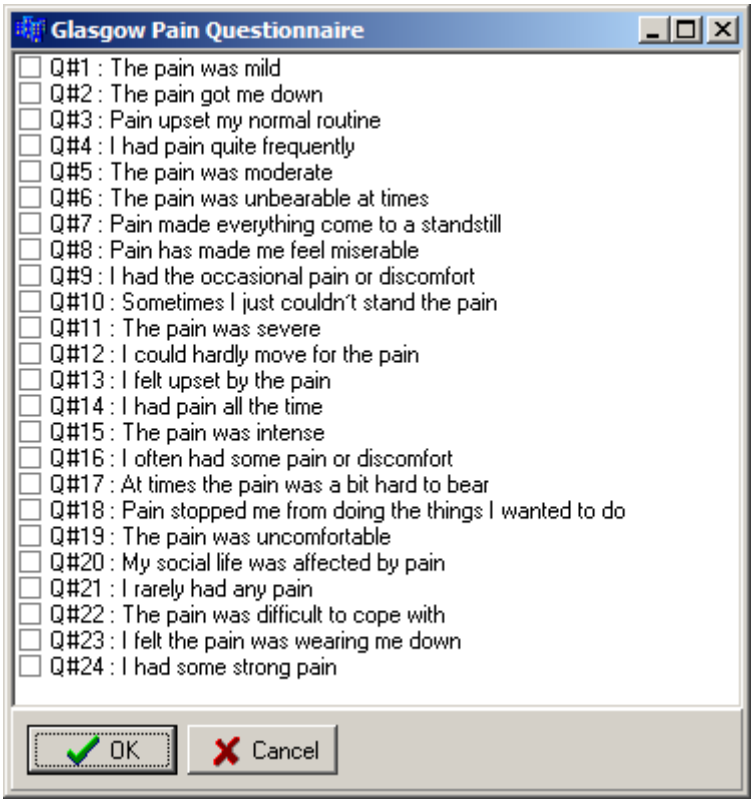
Glasgow Pain Questionnaire
Q#1 : The pain was mild
Q#2 : The pain got me down
Q#3 : Pain upset my normal routine
Q#4 : I had pain quite frequently
Q#5 : The pain was moderate
Q#6 : The pain was unbearable at times
Q#7 : Pain made everything come to a standstill
Q#8 : Pain has made me feel miserable
Q#9 : I had the occasional pain or discomfort
Q#10 : Sometimes I just couldn't stand the pain
Q#11 : The pain was severe
Q#12 : I could hardly move for the pain
Q#13 : I felt upset by the pain
Q#14 : I had pain all the time
Q#15 : The pain was intense
Q#16 : I often had some pain or discomfort
Q#17 : At times the pain was a bit hard to bear
Q#18 : Pain stopped me from doing the things I wanted to do
Q#19 : The pain was uncomfortable
Q#20 : My social life was affected by pain
Q#21 : I rarely had any pain
Q#22 : The pain was difficult to cope with
Q#23 : I felt the pain was wearing me down
Q#24 : I had some strong pain
OK
Cancel

Figure 22 Glasgow Pain Questionnaire

7.3 Graded Chronic Pain Scale

The screen is shown in Figure 23. For the first three and last three questions, move the slider to the correct score using the mouse. The fourth score can be entered by typing in the correct value or by using the arrows to the right of the box to the increase or decrease the score. Press **OK** to record the score. **Cancel** will close the screen without recording any scores.

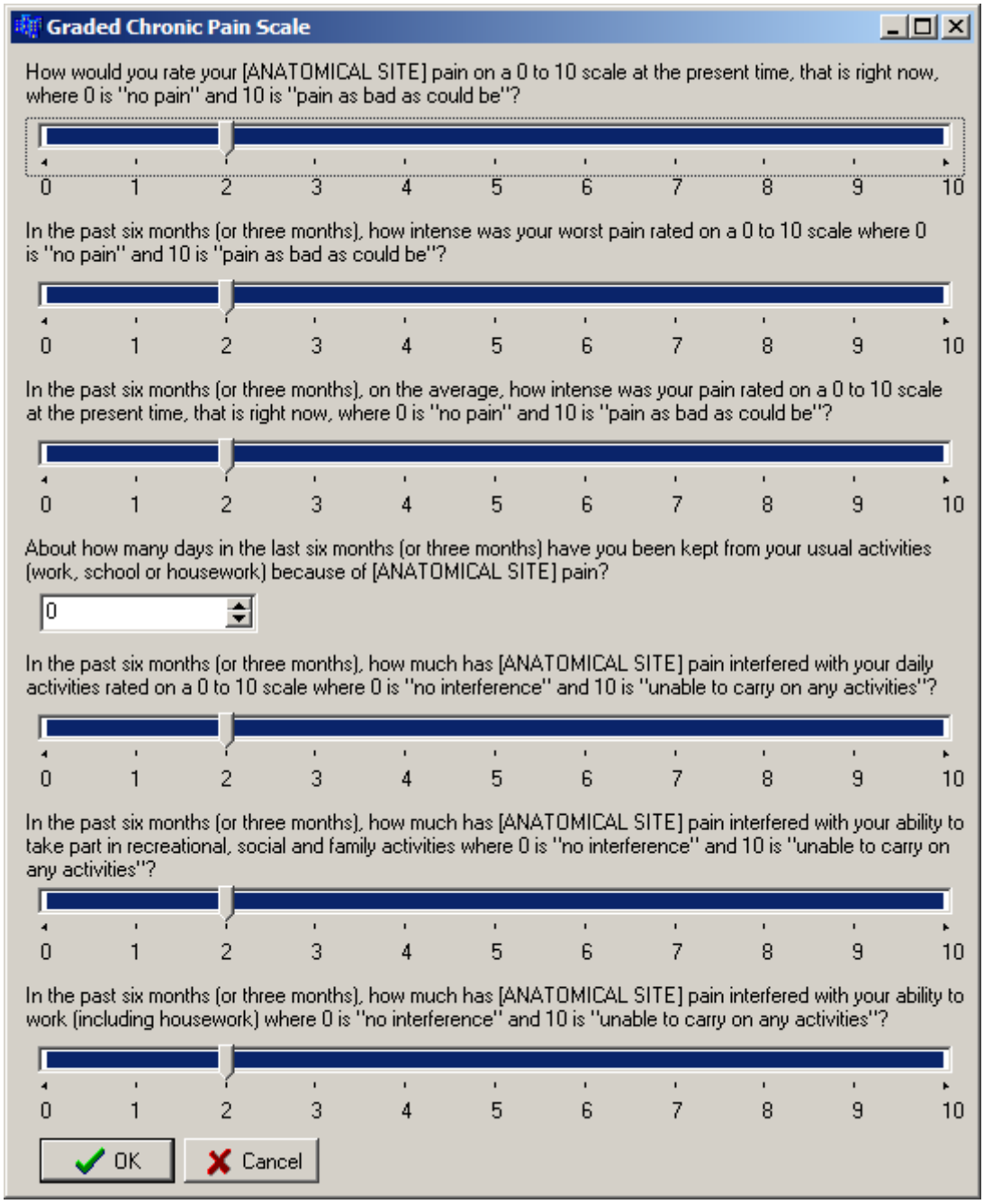
Graded Chronic Pain Scale
How would you rate your [ANATOMICAL SITE] pain on a 0 to 10 scale at the present time, that is right now, where 0 is "no pain" and 10 is "pain as bad as could be"?
0 1 2 3 4 5 6 7 8 9 10
In the past six months (or three months), how intense was your worst pain rated on a 0 to 10 scale where 0 is "no pain" and 10 is "pain as bad as could be"?
0 1 2 3 4 5 6 7 8 9 10
In the past six months (or three months), on the average, how intense was your pain rated on a 0 to 10 scale at the present time, that is right now, where 0 is "no pain" and 10 is "pain as bad as could be"?
0 1 2 3 4 5 6 7 8 9 10
About how many days in the last six months (or three months) have you been kept from your usual activities (work, school or housework) because of [ANATOMICAL SITE] pain?
0
In the past six months (or three months), how much has [ANATOMICAL SITE] pain interfered with your daily activities rated on a 0 to 10 scale where 0 is "no interference" and 10 is "unable to carry on any activities"?
0 1 2 3 4 5 6 7 8 9 10
In the past six months (or three months), how much has [ANATOMICAL SITE] pain interfered with your ability to take part in recreational, social and family activities where 0 is "no interference" and 10 is "unable to carry on any activities"?
0 1 2 3 4 5 6 7 8 9 10
In the past six months (or three months), how much has [ANATOMICAL SITE] pain interfered with your ability to work (including housework) where 0 is "no interference" and 10 is "unable to carry on any activities"?
0 1 2 3 4 5 6 7 8 9 10
OK
Cancel

Figure 23 Graded Chronic Pain Scale Screen

7.4 Range of Movement (ROM) Scales

Enter the ROM value in the box provided. This screen (Figure 24) looks the same for all the ROM scales. Press **OK** to record the score. **Cancel** will close the screen without recording any scores.

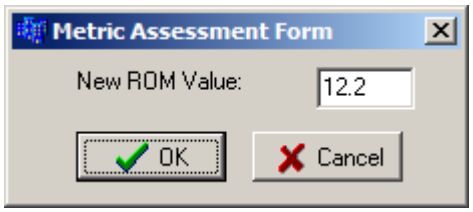

Figure 24 Range of Movement (ROM) Scale Screen

7.5 Centre for Epidemiologic Studies Depression Scale

The data is recorded on a series of forms that looks like Figure 25. The number of the question appears in the first line. The next line contains the question. A list of options is given next. Select the appropriate option. Press the button with the right arrow to move the next question or the button with the left arrow to move to the previous question.

Press **OK** to record the score. This is only allowed if all the questions are answered. **Cancel** will close the screen without recording any scores.

Notice that if the text of the question is not completely displayed the screen can be resized. Grab a vertical edge of the screen with the mouse and move it to the left or right until the text is readable. If all the lines of the question are not displayed, move the mouse the bottom of the panel on which the question is displayed. Notice that the shape of the mouse cursor will change. When the cursor has changed, hold the left mouse button down and drag the mouse so that the cursor moves vertically down. This will enlarge the panel so that all the lines of the text are visible.

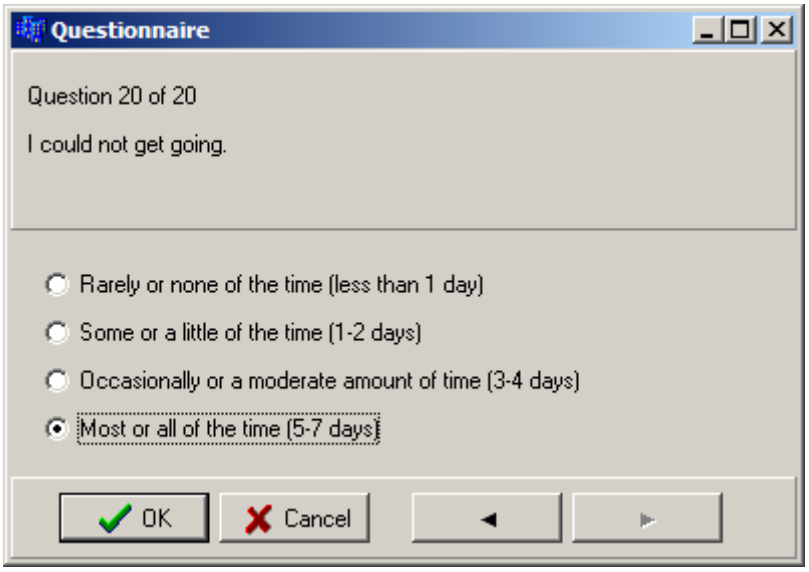
Questionnaire
Question 20 of 20
I could not get going.
Rarely or none of the time (less than 1 day)
Some or a little of the time (1-2 days)
Occasionally or a moderate amount of time (3-4 days)
Most or all of the time (5-7 days)
OK
Cancel

Figure 25 Centre for Epidemiologic Studies Depression Scale

7.6 Fear-Avoidance Beliefs Questionnaire

The data is recorded on a series of forms that looks like Figure 26. The number of the question appears in the first line. The next line contains the question. Move the slider to record the appropriate score. Notice that the score selected on the slider is also displayed in the box marked **Selected Value**. This box only displays the value of the slider and cannot be changed by the user. Press the button with the right arrow to move the next question or the button with the left arrow to move to the previous question.

Press **OK** to record the score. This is only allowed if all the questions are answered. **Cancel** will close the screen without recording any scores.

Notice that if the text of the question is not completely displayed the screen can be resized. Grab a vertical edge of the screen with the mouse and move it to the left or right until the text is readable. If all the lines of the question are not displayed, move the mouse the bottom of the panel on which the question is displayed. Notice that the shape of the mouse cursor will change. When the cursor has changed, hold the left mouse button down and drag the mouse so that the cursor moves vertically down. This will enlarge the panel so that all the lines of the text are visible.

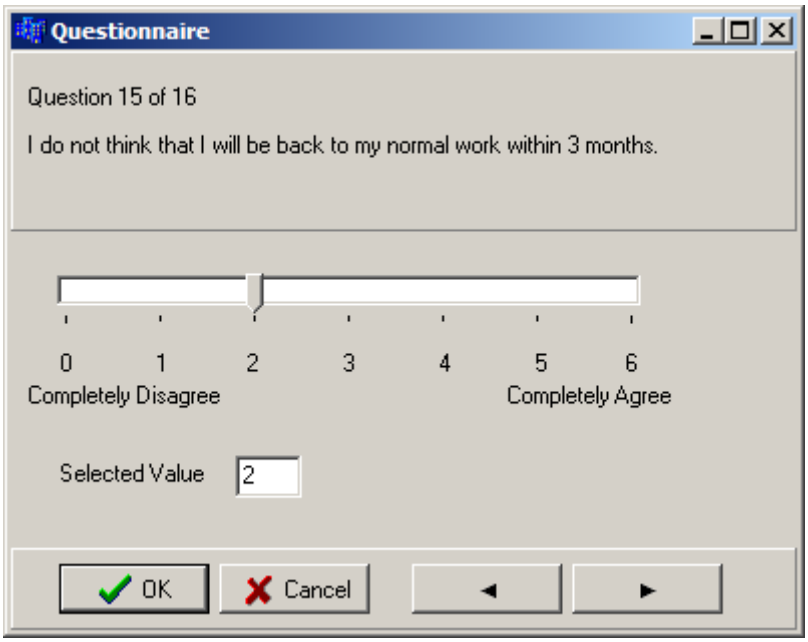

Figure 26 Fear-Avoidance Belief Questionnaire

7.7 Kessler Psychological Distress Scale (K10)

The scores for this scale are recorded in the same way as the scores for the Centre for Epidemiologic Studies Depression Scale.

7.8 Modified Somatic Perceptions Questionnaire

The scores for this scale are recorded in the same way as the scores for the Centre for Epidemiologic Studies Depression Scale.

7.9 Pain Frequency

The score is recorded on the screen that looks like Figure 27. First select the type of score that will be recorded by selecting one of the options **Time Count**, **Verbal Graphic** or **Absolute Visual Analogue**. Then record the score. For the **Time Count**, record the score in the edit box by typing the score or using the up or down arrows. For the other two options, move the slider to the appropriate score.

Press **OK** to record the score. **Cancel** will close the screen without recording any scores. Note that once the score is recorded, the option to change the type of score (**Time Count**, **Verbal Graphic** or **Absolute Visual Analogue**) will not be available again for this episode of care. This ensures the integrity of the data.

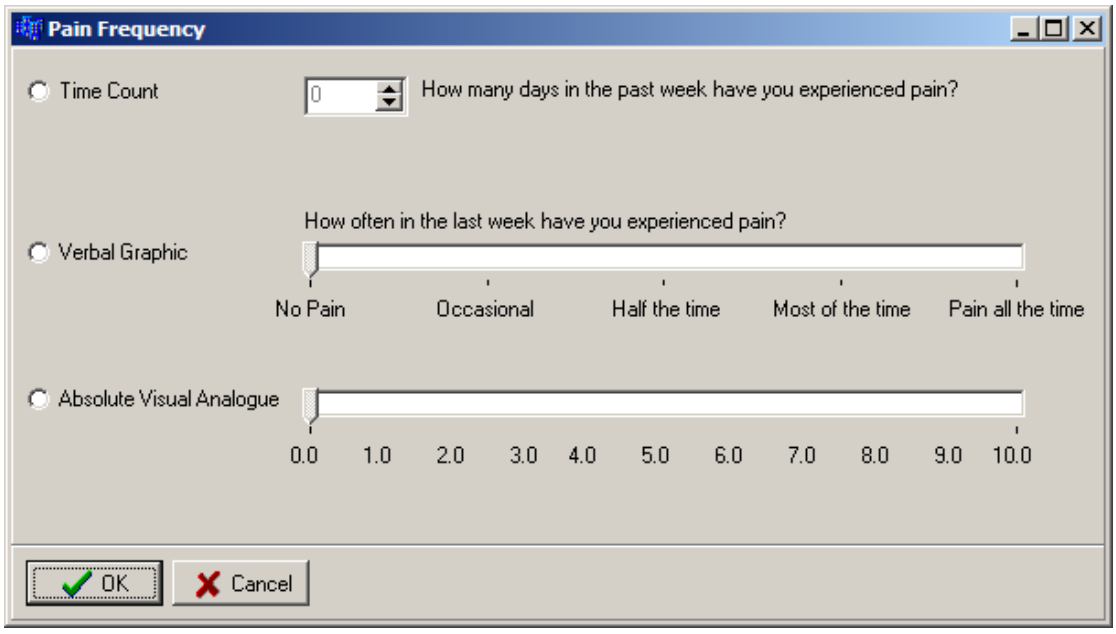

Figure 27 Pain Frequency Screen

7.10 Pain Intensity

The score is recorded on the screen that looks like Figure 28. First select the type of score that will be recorded by selecting one of the options **Numeric Intensity**, **Verbal Graphic** or **Absolute Visual Analogue**. Then record the score by moving the slider to the appropriate score.

Press **OK** to record the score. **Cancel** will close the screen without recording any scores. Note that once the score is recorded, the option to change the type of score (**Numeric Intensity**,

Verbal Graphic or **Absolute Visual Analogue**) will not be available again for this episode of care. This ensures the integrity of the data.

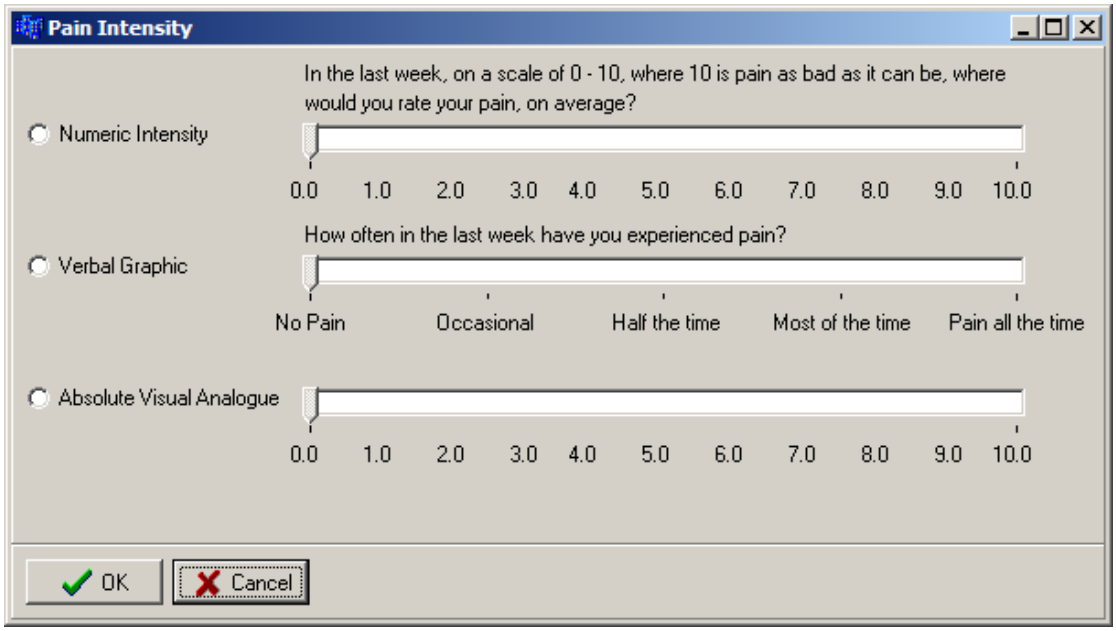
Pain Intensity
In the last week, on a scale of 0 - 10, where 10 is pain as bad as it can be, where would you rate your pain, on average?
Numeric Intensity
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0
How often in the last week have you experienced pain?
Verbal Graphic
No Pain
Occasional
Half the time
Most of the time
Pain all the time
Absolute Visual Analogue
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0
OK
Cancel

Figure 28 Pain Intensity Screen

7.11 Pain Self-Efficacy Questionnaire

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.12 Patient Satisfaction Subscale

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.13 Resumption of Activities of Daily Living Scale

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.14 Short-form McGill Pain Questionnaire

All the questions, except question 16, are recorded in the same way as the Centre for Epidemiologic Studies Depression Scale. Question 16 is recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.15 Tampa Scale of Kinesiophobia (TSK-11)

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.16 Timed Up and Go Test

This score is recorded in the same way as the Range of Movement (ROM) Scales.

7.17 Work-Related Disability (WL-26)

The scores for this scale are recorded in the same way as the scores for the Centre for Epidemiologic Studies Depression Scale.

7.18 Oswestry Disability Index

The scores are recorded on the screen shown in Figure 29. Simply select one of the options numbered 1 to 6 or **Not Allowed** for each of the 10 questions. Press **OK** to record the score. **Cancel** will close the screen without recording any scores.

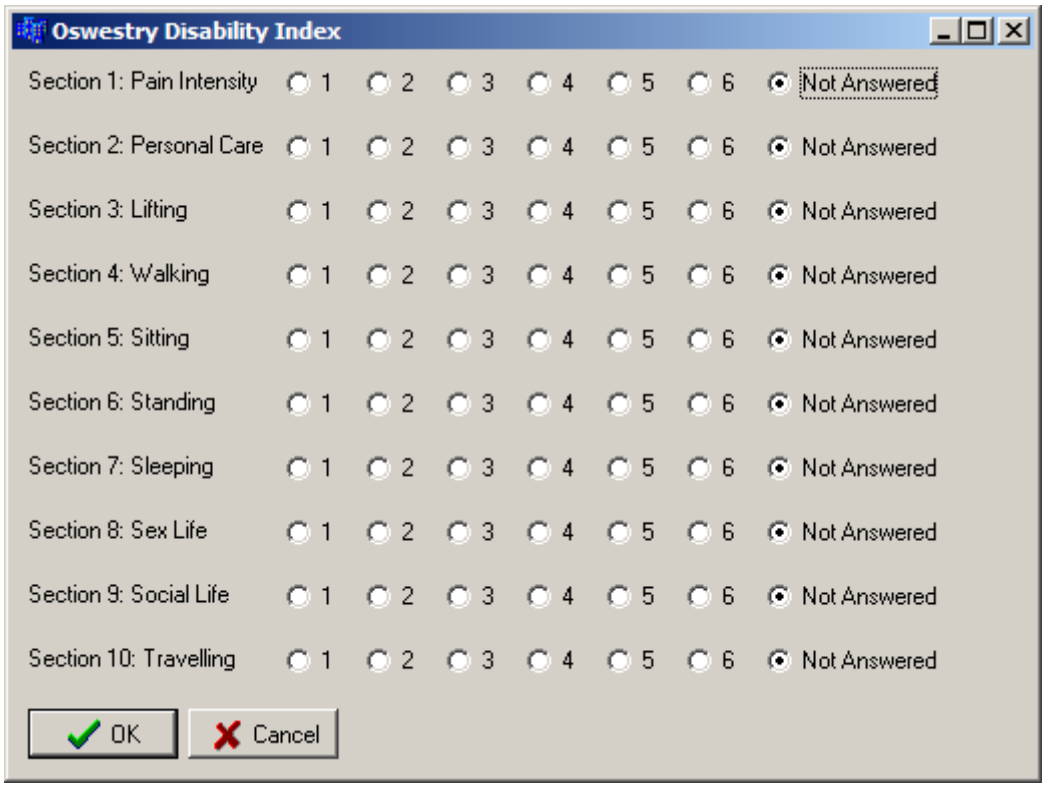
Oswestry Disability Index
Section 1: Pain Intensity 1 2 3 4 5 6 Not Answered
Section 2: Personal Care 1 2 3 4 5 6 Not Answered
Section 3: Lifting 1 2 3 4 5 6 Not Answered
Section 4: Walking 1 2 3 4 5 6 Not Answered
Section 5: Sitting 1 2 3 4 5 6 Not Answered
Section 6: Standing 1 2 3 4 5 6 Not Answered
Section 7: Sleeping 1 2 3 4 5 6 Not Answered
Section 8: Sex Life 1 2 3 4 5 6 Not Answered
Section 9: Social Life 1 2 3 4 5 6 Not Answered
Section 10: Travelling 1 2 3 4 5 6 Not Answered
OK
Cancel

Figure 29 Oswestry Disability Index Screen

7.19 Roland-Morris Questionnaire

The screen is shown in Figure 30. Simply check all the applicable statements in the box to the left of the statement. Press **OK** to record the score. **Cancel** will close the screen without recording any scores.

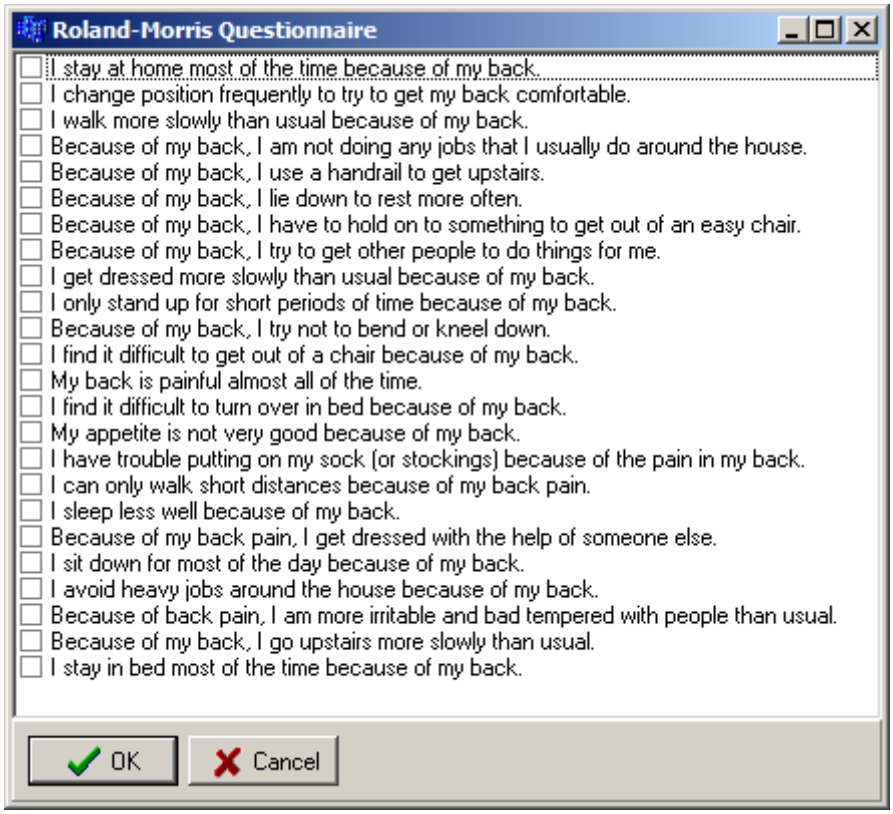
Roland-Morris Questionnaire
I stay at home most of the time because of my back.
I change position frequently to try to get my back comfortable.
I walk more slowly than usual because of my back.
Because of my back, I am not doing any jobs that I usually do around the house.
Because of my back, I use a handrail to get upstairs.
Because of my back, I lie down to rest more often.
Because of my back, I have to hold on to something to get out of an easy chair.
Because of my back, I try to get other people to do things for me.
I get dressed more slowly than usual because of my back.
I only stand up for short periods of time because of my back.
Because of my back, I try not to bend or kneel down.
I find it difficult to get out of a chair because of my back.
My back is painful almost all of the time.
I find it difficult to turn over in bed because of my back.
My appetite is not very good because of my back.
I have trouble putting on my sock (or stockings) because of the pain in my back.
I can only walk short distances because of my back pain.
I sleep less well because of my back.
Because of my back pain, I get dressed with the help of someone else.
I sit down for most of the day because of my back.
I avoid heavy jobs around the house because of my back.
Because of back pain, I am more irritable and bad tempered with people than usual.
Because of my back, I go upstairs more slowly than usual.
I stay in bed most of the time because of my back.
OK
Cancel

Figure 30 Roland-Morris Questionnaire Screen

7.20 Copenhagen Neck Functional Disability Scale

The scores for this scale are recorded in the same way as the scores for the Centre for Epidemiologic Studies Depression Scale.

7.21 Dizziness Handicap Inventory

The scores for this scale are recorded in the same way as the scores for the Centre for Epidemiologic Studies Depression Scale.

7.22 Migraine Disability Assessment Questionnaire

The data is recorded on a series of forms that looks like Figure 31. The number of the question appears in the first line. The next line contains the question. Record the answer in the box provide by typing in the value or by using the up and down arrows. Press the button with the right arrow to move the next question or the button with the left arrow to move to the previous question.

Press **OK** to record the score. This is only allowed if all the questions are answered. **Cancel** will close the screen without recording any scores.

Notice that if the text of the question is not completely displayed the screen can be resized. Grab a vertical edge of the screen with the mouse and move it to the left or right until the text is readable. If all the lines of the question are not displayed, move the mouse the bottom of the panel on which the question is displayed. Notice that the shape of the mouse cursor will change. When the cursor has changed, hold the left mouse button down and drag the mouse so that the cursor moves vertically down. This will enlarge the panel so that all the lines of the text are visible.

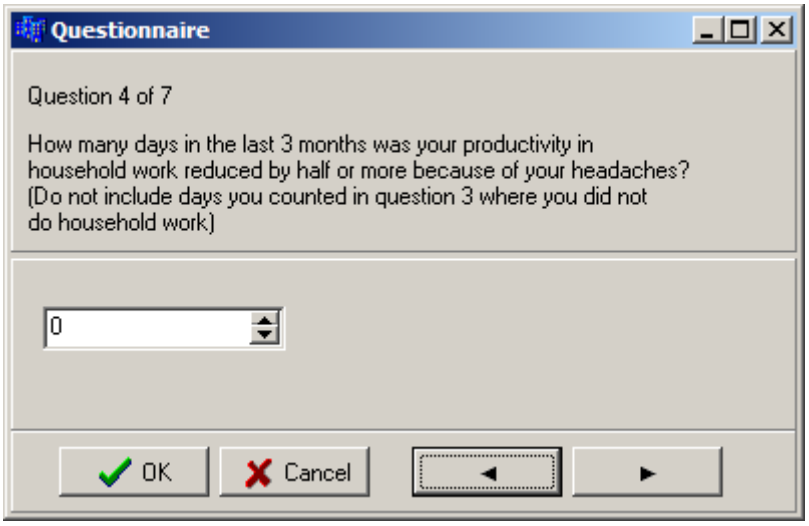
Questionnaire
Question 4 of 7
How many days in the last 3 months was your productivity in household work reduced by half or more because of your headaches? (Do not include days you counted in question 3 where you did not do household work)
0
OK
Cancel

Figure 31 Migraine Disability Assessment Questionnaire Screen

7.23 Neck Pain and Disability Scale

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.

7.24 Vernon Moir Neck Disability Index

The scores for this scale are recorded in the same way as the scores for the Oswestry Disability Index.

7.25 Whiplash Disability Questionnaire

The scores for this scale are recorded in the same way as the scores for the Fear-Avoidance Beliefs Questionnaire.